

Abstract

A process for manufacturing continuous polyester filament yarn for technical applications from a polymer over 90% of the chains of which are composed of ethylene terephthalate units, via a one-step spinning process, with the undrawn filaments having a crystallinity smaller than 16% and the yarn being wound at a rate larger than 6000 m/min. .
The yarn obtained in this fashion is particularly suitable for use as reinforcing material in rubber articles, notably as reinforcing material in pneumatic tyres for cars.

The polyester filament yarn can be used to make cords of uncommonly high dimensional stability and a unique combination of breaking tenacity, shrinkage, and breaking toughness.